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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,402	07/20/2001	Daryoosh Vakhshoori	CORE-70	9656

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EXAMINER

ZAHN, JEFFREY N

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Offic Action Summary</b>	Applicati n N .	Applicant(s)
	09/910,402	VAKHSHOORI ET AL.
	Examiner	Art Unit
	Jeffrey N Zahn	2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_ is/are allowed.

6) Claim(s) 1-16 is/are rejected.

7) Claim(s) \_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

*Paul J.*  
PAUL J.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Pri ority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.

4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 1, and all claims that depend therefrom (Claims 1-6), it is unclear/vague what type of VSEL is being claimed. The written description of the invention clearly specifies a tunable VCSEL. In addition, the Applicant has not particularly pointed out in the claims the necessary structural elements and cooperative relationships of the subject matter regarded as the invention. Specifically, the optical elements of Fig.1 that enable a tunable VCSEL and fiber amplifier to be optically pumped by a common pump source.

Regarding Claim 7, and all claims that depend therefrom (Claim 8), it is unclear/vague what type of VSEL is being claimed. The written description of the invention clearly specifies a tunable VCSEL. In addition, the Applicant has not particularly pointed out in the claims the necessary structural elements and cooperative relationships of the subject matter regarded as the invention.

In addition, it is unclear/vague where in the specification the Applicant is referring to in regards to 1) "means for directing said pump laser beam into said VCSEL..." and 2) "means for directing said VCSEL laser beam into said optical gain fiber..." Furthermore,

it is not clear if this means for clause applies to "(b) injecting said pump laser beam into said optical gain fiber...." This claim would be clearer if indentations were used to clearly indicate elements/subelements.

Regarding Claim 8, it is unclear what structure "means for" on page, 19, line 5 refers to, "means for" on page 19, line 8 and "means for" on page 19, line 17.

Regarding Claim 9, and all claims that depend therefrom (Claims 10-14), it is unclear/vague what type of VSEL is being claimed. The written description of the invention clearly specifies a tunable VCSEL. In addition, it is unclear what structure "means for" on page 20, line 4 refers to, and "means for" on page 20, line 11.

Regarding Claim 15, and all claims that depend therefrom (Claim 16), it is unclear/vague what type of VSEL is being claimed. The written description of the invention clearly specifies a tunable VCSEL. In addition, "being adapted to" is indefinite; this language makes it unclear how the WDM relates to items (a) and (b) of the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Hsu et al. (US 6263002).

Regarding Claims 1 and 7, and all claims that depend therefrom (Claims 2-6 and 8-), Hsu et al. discloses a fiber-semiconductor laser source comprising an optically pumped VCSEL (col. 12, lines 44-60) and a fiber amplifier (col. 12, lines 44-60) from the laser output of said VCSEL, which are optically pumped by a common optical source.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Walker et al. (US 6445495).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey N Zahn whose telephone number is 703-305-3443. The examiner can normally be reached on M-F: 8:30-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on 703-308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Jeffrey Zahn  
June 26, 2003



PAUL IP  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800